AMSAT News Service Weekly Bulletins
Issue: ANS-132
Date: 1990-05-12
Sources: amsat-ans-1990-ans-118.01.txt

SB ALL @ AMSAT $ANS-132.01
STS-35/SAREX-II MISSION DELAYED

HR AMSAT NEWS SERVICE BULLETIN 132.01 FROM AMSAT HQ
SILVER SPRING, MD MAY 12, 1990
TO ALL RADIO AMATEURS BT

Payload Cooling Problem Delays STS-35/SAREX-II Mission

NASA managers this week announced that they have decided to delay the launch of STS-35 due to a problem in a freon cooling system designed to keep the temperature of electronic instruments in the ASTRO-1 Observatory payload within safe limits. The repair of the faulty cooling valve in Shuttle Columbia could take up to three weeks depending on if the work can be done at the launch pad. It is hoped that Columbia will not have to be rolled back to the Orbiter Processing Facility for this work. On this STS-35 mission, payload specialist Ron Parise (WA4SIR) will be be the station operator of WA4SIR-1 for the Shuttle Amateur Radio Experiment (SAREX) that will consist of a ROBOT packet station and voice operation on 2 meter FM.

Based on information from NASA press releases, it appears that the STS-35/SAREX mission will not be launched before the first week of June. And that depends on how well this never-done-before repair goes. As soon as ARRL/AMSAT officials have be notified about the new launch date, all pertinent information will be issued immediately via ARRL bulletins, ANS bulletins, and AMSAT Nets.

/EX
SB ALL @ AMSAT $ANS-132.02
AMSAT HF NET SCHEDULES

HR AMSAT NEWS SERVICE BULLETIN 132.02 FROM AMSAT HQ
SILVER SPRING, MD MAY 12, 1990
TO ALL RADIO AMATEURS BT

Numerous Regularly Scheduled AMSAT HF Nets Provide Timely Information

With events occuring so quickly in the world of amateur radio satellites, the quickest place to find information about operational news is on one of the many weekly HF AMSAT Nets. The following is a schedule some of these nets:

DAY	TIME	FREQUENCY	NCS	COMMENT
Sunday	09:00 UTC	14.280 MHz	ZS6AKV	AMSAT-SA Net
Sunday	10:00 UTC	3.685 MHz	VK5AGR	AMSAT Australia
Sunday	19:00 UTC	14.282 MHz	WD0HHU	AMSAT International Net
Sunday	19:00 UTC	21.280 MHz	W8GQW	Simulcasts On AO-13 when in View On 145.955 Mode B
Sunday	23:00 UTC	18.155 MHz	N4QQ	Excellent DX Windows
Tuesday	9:00 P.M. EDT	3.840 MHz	W8GUS	AMSAT East Coast Net
Tuesday	9:00 P.M. CDT	3.840 MHz	W0CY	AMSAT Mid America Net
Tuesday	9:00 P.M. PDT	3.840 MHz	KI6QE	AMSAT West Coast Net
Saturday	15:00 UTC	28.460 MHz	WB2YGA	AMSAT Beginner's Net
Saturday	10:00 UTC	14.280 MHz	PA0DLO	AMSAT European Net
Saturday	22:00 UTC	14.282 MHz	ZL1WN	AMSAT South Pacific Net

In addition to these weekly nets, there are also AMSAT Operations Nets held on AO-13 on a regular basis. The Operation's Net Schedules are published by AMSAT

VP of Operations, Courtney Duncan (N5BF). If you are unable to copy any of the above nets, the AMSAT News Service (ANS) bulletins are found on many packet radio BBSs throughout the world. The ANS bulletins contain the latest operational information.

The AMSAT/DRIG land-line BBS contains the not only the current ANS bulletins for the week but also the bulletins for the past several months and other timely information. The AMSAT/DRIG BBS can be reached at (214) 394-7438. Check into the AMSAT Net nearest you and stay up to date in the exciting world of OSCAR satellites.

/EX
SB ALL @ AMSAT $ANS-132.03
MOUSE DRIVER PROBLEM WITH INSTANTTRACK

HR AMSAT NEWS SERVICE BULLETIN 132.03 FROM AMSAT HQ
SILVER SPRING, MD MAY 12, 1990
TO ALL RADIO AMATEURS BT

Microsoft Software Found to Cause Intermittant Problems

Some InstantTrack users have recently discovered a problem where the map "goes away" or "freezes" when they use their mouse. InstantTrack's author Franklin Antonio (N6NKF) has determined that this problem is a result of a conflict with the Microsoft mouse driver [MOUSE.COM] versions 7.00, 7.01, 7.02, and 7.03. Changing to a mouse driver version earlier than 7.00 or later than 7.03 is the cure. An update of InstantTrack is not required to resolve this problem.

Microsoft is aware of the problem, as it occurs with many programs other than InstantTrack. InstantTrack users who are experiencing this problem should contact Microsoft and ask to obtain version 7.04 of MOUSE.COM.

/EX
SB ALL @ AMSAT $ANS-132.04
TELEMETRY ARCHIVE FORMAT ANNOUNCED

HR AMSAT NEWS SERVICE BULLETIN 132.04 FROM AMSAT HQ
SILVER SPRING, MD MAY 12, 1990
TO ALL RADIO AMATEURS BT

OSCAR Telemetry Archive Data Submission Format Announced

Reid Bristor (WA4UPD), AMSAT-NA Microsat Data Archive Manager has released the following information intended to govern submissions to the telemetry archive. Submissions using any file naming convention will be accepted through June 1, 1990 as previously announced. Following that date, files submitted not conforming to the following requirements may be returned for updating by the submitter.

Data is currently being stored within the archive in raw format since this form contains all information and uses the smallest amount of file space. Abbreviated submissions may consist only of raw digital telemetry or CW.

Whole Orbit Data collected from the Microsats to date has been archived; it was collected in single sessions and downlinked repeatedly afterwards. Future WOD reports and all live data, past, present, and future are requested from all satellite listeners.

Reid reports that submissions of and requests for Microsat data are picking up.

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DATA SUBMISSION REQUIREMENTS
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MEDIA FORMAT:**   IBM 5 1/4", 180k,360k,1.2m
                  IBM 3 1/2", 770k,1.44m
                  COMMODORE 1541, 1571, 1581
                  DEC RX01/02, RX50, TK50

FILE FORMAT:      1 file per pass
                  Filename - mmddhhmm.ssx
                           mm = Month (02=Feb, 05=MAY, 11=NOV, etc.)
                           dd = DAY   (Correct UTC DAY)
                           hh = HOUR OF AOS (UTC)
                           mm = MINUTE OF AOS
                           ss = SATELLITE NUMBER (17 = DOVE, 19 = LUSAT, etc.)
                            x = DATA TYPE AS INDICATED

           DATA TYPE (x) -  A = ASCII (DOVE ascii text, N4HY dump)
                            C = CW (LUSAT, FO20, AO13, etc.)
                            P = Processed (N4HY, or LU7ABF, etc.)
                            R = RAW (KISS format)
                            T = TELEMETRY
                        *   W = WEBERSAT info

        "*"  indicates additional characters will be assigned as
             WEBERSAT PICTURE data matures.

        "**" For accomodation of other disk formats, contact WA4UPD.

SUBMIT TO:      Reid Bristor, WA4UPD
                4535 Deerwood Trail
                Melbourne, Florida 32934
                Phone (407) 242-0082


/EX
SB ALL @ AMSAT   $ANS-132.05
OPERATIONS NET SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 132.05 FROM AMSAT HQ
SILVER SPRING, MD MAY 12, 1990
TO ALL RADIO AMATEURS BT

AMSAT-NA Operations Net Schedule Announced

AMSAT Operations Nets are planned for the following times.  Mode B nets are
conducted on an AO-13 downlink frequency of 145.950.  Mode J/L nets are
conducted on an AO-13 downlink frequency of 435.970.


Date UTC   Time  Phs  Mode  NCS  U.S. Day

24 May 90  0145  104  J/L  TBD   Wednesday

04 Jun 90  0100  104  J/L  TBD   Sunday
15 Jun 90  0115  104  J/L  N5BF  Thursday
26 Jun 90  0115  144  B    N5BF  Monday

For information on the amateur satellite program and how you can participate,
contact AMSAT-NA at P.O. Box 27, Washington, DC 20044, phone (301) 589-6062,
or contact your local AMSAT Area Coordinator.
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/EX
SB ALL @ AMSAT $ANS-132.06
NEW AO-13 TRANSPONDER SCHEDULE

HR AMSAT NEWS SERVICE BULLETIN 132.06 FROM AMSAT HQ
SILVER SPRING, MD MAY 12, 1990
TO ALL RADIO AMATEURS BT

New Transponder Schedule in Effect After Magnetorquing

Command Stations have completed magnetorquing of AO-13 during the perigees of recent orbits. This procedure is essentialy complete and has re-aligned AO-13 for better Sun angles. The new transponder schedule has been announced by the AO-13 Command Station Team:

AO-13 Transponder Schedule from 05 May 90

Mode-B	: MA 000 to MA 100
Mode-JL	: MA 100 to MA 125
Mode-LS	: MA 125 to MA 130 (Mode S Beacon only)
Mode-S	: MA 130 to MA 135
Mode-BS	: MA 135 to MA 140
Mode-B	: MA 140 to MA 256
Omnis	: MA 220 to MA 040

The best estimate of the current attitude is:

BLON = 180 and BLAT = +3 for 05 May 90

More exact values will be announced soon. Only the Mode-L transponder and the Mode-S beacon will be on from MA 125 to MA 130. Cross mode B and S QSOs are possible during MA 135 to 140.

AO-10 is currently experiencing poor solar panel illumination angles and until further notice its transponder is not available for use.

/EX
SB ALL @ AMSAT $ANS-132.07
FO-20 ELEMENT SET PROBLEMS NOTED

HR AMSAT NEWS SERVICE BULLETIN 132.07 FROM AMSAT HQ
SILVER SPRING, MD MAY 12, 1990
TO ALL RADIO AMATEURS BT

AMSAT-NAs Orbital Data Manager, Dick Campbell, N3FKV has been informed by Tak Okamoto of JAMSAT that the NASA elements for FO-20 are in error. It appears that NORAD is tracking another vehicle launched with MOS-1B and FO-20 (called DEBUT). This vehicle is about 2.75 minutes behind FO-20 and the elements from NASA appear to be for this spacecraft. The current elements being distributed for FO-20 are valid if approximately 2.5-3.0 minutes are added to the user's clock, which should be acceptable in most cases. Dick is working to resolve this element set problem.

Dissemination of this information to FO-20 users will be appreciated.

/EX

Posted: Sun, May 20, 1990 3:42 AM GMT Msg: NGJA-4265-5154
From: TCLARK
To: is
Subj: SAREX.005 Bulletin

SB SAREX @ AMSAT < W3IWI $SAREX.005
SAREX/WA4SIR flight May 30th

SAREX Bulletin SAREX.005
de W3IWI May 19, 1990

AMSAT has received word that launch of the Shuttle Columbia STS-35 mission with Ron Parise, WA4SIR and the SAREX amateur radio hardware may now take place as early as Wed. May 30 at 04:38z. A flight readiness review that will confirm the launch date is planned for Thurs. May 24.

The NASA launch status report issued 14:30z on Friday, May 18th from Cape Kennedy reports:

STS-35 - COLUMBIA (OV 102) - PAD 39-A

"A new flow proportional valve was successfully installed in Columbia's freon cooling system. A leak check of the freon cooling system pump is planned today. Later today, vacuuming of the system will begin and will continue through the weekend. Early next week, the system will be filled with refrigerant and tested. Repair work and associated testing of the freon cooling system is estimated to be complete by next week."

"Payload officials are continuing to monitor the status of the Astro payload. The Broad Band X-ray Telescope, one of the Astro-1 telescopes, was serviced with argon yesterday."

"Pre-launch activities scheduled this weekend include the installation of ordnance devices, pressurization of the orbiter's hypergolic propellant tanks and loading the dewars, or storage tanks, on the pad's structure with liquid oxygen and liquid hydrogen reactants. During the launch countdown, the orbiter's fuel cell storage tanks will be loaded from these dewars."

Based on an 04:38z launch, the following preliminary Keplerian elements have been supplied by W5RRR at the NASA Johnson Space Center. First the "2-liner" element set JSC-0011:

```
STS-35
1 00035U          90150.24513889  .00031000           22174-3 0   110
2 00035  28.4690 148.3930 0005720 246.6067 119.6564 15.71792660    20
```

And the same data in the longer "AMSAT standard" format:

```
Satellite: STS-35
Epoch time:      90150.24513889
Element set:     JSC-0011
Inclination:       28.4690 deg
RA of node:        148.3930 deg
Eccentricity:    0.0005720
Arg of perigee:    246.6067 deg
Mean anomaly:      119.6564 deg
Mean motion:    15.71792660 rev/day
Decay rate:        3.1e-04  rev/day^2
Epoch rev:             2
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/EX